

## **AMENDMENTS**

## In the Claims

Please amend claims 1, 8, 15, 20, 27, 38, and 44 as shown herein.

Please add new claim 53 as indicated below.

Claims 1-4, 7-8, 15-23, 26-27, 38, 40-44, and 53 are pending and are listed following:

1. (currently amended) A network system, comprising:

a network server configured to maintain network access information corresponding to users authorized to access the network system;

a domain controller remotely located from the network server at a remote network site and communicatively linked with the network server, the domain controller configured to locally administrate access to the network system;

the domain controller further configured to:

track individual users that request access to the network system via the domain controller at the remote network site, the domain controller configured to track a user by identifying the remote network site where the user requests the access, recording a time at which the request is made, and monitoring when the network access information is cached for the user that requests the access:

receive a first network access request from the user and validate the first network access request with the network access information maintained at the network server when the network access information is not cached at the domain controller:

1 cache the network access information; and  
2 receive a second network access request from the user and validate the  
3 second network access request with the network access information cached at the  
4 domain controller.

5  
6 **2. (previously presented)** A network system as recited in claim 1,  
7 wherein the domain controller is further configured to cache the network access  
8 information only for the individual users that request access to the network system  
9 via the domain controller at the remote network site.

10  
11 **3. (previously presented)** A network system as recited in claim 1,  
12 wherein the domain controller is further configured to update the network access  
13 information at the domain controller for the individual users that request access to  
14 the network system via the domain controller at the remote network site.

15  
16 **4. (previously presented)** A network system as recited in claim 1,  
17 wherein the domain controller is further configured to update the network access  
18 information at the domain controller for the individual users that request access to  
19 the network system via the domain controller at the remote network site within a  
20 defined time interval.

21  
22 **5-6. (canceled)**  
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1           **7. (previously presented)** A network system as recited in claim 1,  
2 wherein the domain controller is further configured to validate the second network  
3 access request with the network access information cached at the domain  
4 controller if the second network access request is within a defined time interval.

5  
6           **8. (currently amended)** A network system as recited in claim 1,  
7 wherein:

8           the network access information comprises identifiers to indicate network  
9 group memberships that an individual user is a member of in the network system;

10           the domain controller is further configured to maintain user objects  
11 associated with the individual users that request access to the network system from  
12 the domain controller, and cache the identifiers to the user objects; and

13           the network server is further configured to replicate a partial copy of the  
14 user objects from the domain controller such that the replicated partial copy of the  
15 user objects can be used to identify the network group memberships for the  
16 individual user.

17  
18           **9-14. (canceled)**

1           **15. (currently amended)**       A network, comprising:

2           a global information server configured to maintain network information

3           corresponding to users of the network;

4           a remote server communicatively linked with the global information server,

5           the remote server configured to:

6           receive a first network access request from a user and validate the first

7           network access request with the network information maintained at the global

8           information server when the network information corresponding to the user is not

9           cached at the remote server;

10           cache the network information corresponding to the user at the remote

11           server;

12           receive a second network access request from the user and validate the

13           second network access request with the network information cached at the remote

14           server;

15           track individual users that request access to the network from the remote

16           server by identifying the remote server where the user requests the access,

17           recording a time at which the request is made, and monitoring when the network

18           information is cached for the user that requests the access; and

19           update the network information cached at the remote server for the

20           individual users that access the network from the remote server.

1           **16. (previously presented)** A network as recited in claim 15,  
2 wherein the remote server is further configured to update the network information  
3 cached at the remote server for the individual users that access the network from  
4 the remote server within a defined time interval.

5  
6           **17. (previously presented)** A network as recited in claim 15,  
7 wherein the remote server is further configured to validate the second network  
8 access request with the network information cached at the remote server if the user  
9 accessed the network from the remote server within a defined time interval.

10  
11          **18. (original)** A network as recited in claim 15, wherein the remote  
12 server is further configured to track individual users that request access to the  
13 network information cached at the remote server.

14  
15          **19. (original)** A network as recited in claim 15, wherein the remote  
16 server is further configured to receive a user request to access the network  
17 information cached at the remote server and validate the user request if the user  
18 accessed the network from the remote server within a defined time interval.

1           **20. (currently amended)**       A method, comprising:

2           maintaining network access information at a first network site, the network  
3           access information identifying users authorized to access a network;

4           validating a first network access request from a user at a second network  
5           site with the network access information maintained at the first network site when  
6           the network access information identifying the user is not cached at the second  
7           network site;

8           caching the network access information identifying the user at the second  
9           network site;

10           validating a second network access request from the user at the second  
11           network site with the network access information cached at the second network  
12           site; and

13           tracking individual user requests to access the network from the second  
14           network site by identifying the second network site where the user requests the  
15           access, recording a time at which the user requests the access, and monitoring  
16           when the network access information identifying the user is cached for the user  
17           making the request.

18           **21. (previously presented)**       A method as recited in claim 20, wherein

19           said caching comprises storing the network access information at the second  
20           network site only for the individual users that request access to the network from  
21           the second network site.

1           **22. (previously presented)** A method as recited in claim 20, further  
2 comprising updating the network access information at the second network site for  
3 the individual users that periodically request access to the network from the  
4 second network site.

5  
6           **23. (previously presented)** A method as recited in claim 20, further  
7 comprising updating the network access information at the second network site for  
8 the individual users that request access to the network from the second network  
9 site within a defined time interval.

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11           **24-25. (canceled)**

12  
13           **26. (previously presented)** A method as recited in claim 20, wherein  
14 said validating the second network access request comprises validating the second  
15 network access request with the network access information cached at the second  
16 network site if the second network access request is within a defined time interval.

17  
18           **27. (currently amended)** A computer readable medium Computer  
19 readable media comprising computer executable instructions that, when executed,  
20 direct a computing system to perform the method of claim 20.

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22           **28-37. (canceled)**

1                   **38. (currently amended)**       A method, comprising:

2                   maintaining network information at a global information server, the

3                   network information corresponding to users of the network;

4                   receiving a first network access request from a user at a remote server

5                   communicatively linked with the global information server;

6                   validating the first network access request at the remote server with the

7                   network information maintained at the global information server when the network

8                   information corresponding to the user is not cached at the remote server;

9                   caching the network information corresponding to the user at the remote

10                  server;

11                  receiving a second network access request from the user at the remote

12                  server;

13                  validating the second network access request at the remote server with the

14                  network information cached at the remote server;

15                  tracking users that request access to the network via the remote server by

16                  identifying where the access requests originate and recording a time at which the

17                  access requests are made; and

18                  updating the network information cached at the remote server with the

19                  network information maintained at the global information server for users

20                  authorized to access the network from the remote server, and that accessed the

21                  remote server within a defined time interval.

22                   **39. (canceled)**

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1           **40. (previously presented)**   A method as recited in claim 38, wherein  
2    said validating the second network access request comprises validating the second  
3    network access request with the network information cached at the remote server  
4    if the second network access request is received within a defined time interval.

5  
6           **41. (previously presented)**   A method as recited in claim 38, further  
7    comprising:

8            tracking users that access the network information cached at the remote  
9    server; and

10            updating the network information cached at the remote server with the  
11    network information maintained at the global information server for users  
12    authorized to access the network information from the remote server, and that  
13    accessed the network information cached at the remote server within a defined  
14    time interval.

15  
16           **42. (previously presented)**   A method as recited in claim 38, further  
17    comprising:

18            receiving a user request to access the network information cached at the  
19    remote server; and

20            validating the user request at the remote server.

1           **43. (previously presented)**    A method as recited in claim 38, further  
2 comprising:

3           receiving a user request to access the network information cached at the  
4 remote server; and

5           validating the user request at the remote server if the user request is  
6 received within a defined time interval.

7  
8           **44. (currently amended)**    A ~~computer readable medium~~ Computer  
9 ~~readable media~~ comprising computer executable instructions that, when executed,  
10 direct a computing system to perform the method of claim 38.

11  
12           **45-52. (canceled)**

1           Please add new claim 53 as follows:

2           **53. (new) A network system, comprising:**

3           a global information server located at a main site on a network and  
4           configured to maintain network access information corresponding to users  
5           authorized to access the network;

6           a domain controller located at a remote site on the network and  
7           communicatively linked with the global information server, the domain controller  
8           configured to periodically cache the network access information from the global  
9           information server and to locally administrate network access requests made from  
10           a work station locally connected to the domain controller at the remote site; and

11           the domain controller further configured to track individual users that  
12           request access to the network by identifying the remote site where the request is  
13           made and a time at which the request is made.